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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,112	06/16/2000	Henry Haverinen	944-001-031	1596

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EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,112

Applicant(s)

HAVERINEN ET AL.

Examiner

PHUC H TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 12-26 is/are rejected.
- 7) ☒ Claim(s) 7,8,10 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4,6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 4, 21, 26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Regarding to claims 4,21,26, "time instants are expressed in relation to some time instant that the mobile node and the visited-domain agent both know, including a time instant of periodic paging area advertisements" is not clearly taught how the time instants relating to some time instant and what the time instants are.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 6, 9, 12-20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan (U.S. Patent No. 6680920).

- With respect to claims 1, 5, 16, 18, & 22-23, Wan teaches a mobile Internet protocol regional paging network having a-visited-domain mobility agent (710 in Fig. 7) for handling a regional registration of a mobile node (MS in Fig. 1) visiting a paging area (e.g. Fig. 1),

the mobile node having an idle mode module for periodically providing an idle mode request to the visited-domain mobility agent containing information that the mobile node is entering an idle mode (col. 6, lines 56-67) so as to deactivate one or more components for energy saving purposes and reduce active communication with the mobile internet protocol regional paging network (col. 7, lines 13-19),

the mobile node negotiating a time slot based paging scheme with the visited-domain mobility agent (col. 3, line 36-42). Wan fails to teach the negotiating a time slot based paging scheme, but it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to understand the time slot is provided in Wan's invention for the idle mode in the wireless communication system.

- With respect to claim 2, Wan also teaches characterized in that the time slot based paging scheme includes the exchange of information about time slots used for paging area advertisements by the visited-domain mobility agent, a message for the mobile node to deduce its current paging area, or a combination thereof (e.g. the short paging channel for the mobile to shut down at giving time slot Fig. 14, col. 2, lines 45-55).

- With respect to claims 3, 20, & 25, Wan teaches characterized in that time instant are expressed in relation to a current time of day, if the mobile node and the visited-domain agent have accurate and synchronized time of day clocks (Fig. 9 the mobile station synchronizes with the MSC).

- With respect to claim 6, Wan teaches characterized in that one of the parameters is a paging slot interval parameter for time slot based paging support (col. 25, lines 62-65).

- With respect to claims 9, & 17, Wan discloses characterized in that the visited-domain mobility agent has a visitor list module that responds to the idle mode request, modifies its visitor list to include the mobile node and maintains a paging state for the mobile node as an idle mode (706 in Fig. 7, col. 2, lines 18-25).

- With respect to claims 12-15, Wan also discloses characterized in that the visited-domain mobility agent responds to a regional registration request from the mobile node and maintains the paging state for the mobile node as an active mode (block 1006-1012 in Fig. 10).

- With respect to claims 19, & 24, Wan teaches characterized in that the time slot paging module negotiates a time slot based paging scheme with the visited-domain mobility agent and agrees on time slots used for paging area advertisements and paging within the paging area (col. 1, lines 52-55; col. 9, lines 54-57).

Allowable Subject Matter

5. Claims 7-8, and 10-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
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Art Unit 2664

Pt
10/16/04



DANGTON
PRIMARY EXAMINER